REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks.

Claims 1, 3-4, 6-15, 17-23 and 25-27 are pending in the application, with Claims 1, 15, and 23 being independent. Claims 2, 5, 16, and 24 were previously canceled, and Claims 4 and 26 are canceled herein without prejudice to or disclaimer of the subject matter recited therein. Claims 1, 15, and 23 are amended herein. Support for the claim amendments and additions can be found in the original disclosure. No new matter has been added.

§ 101 REJECTIONS

Claims 23 and 25-27 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicant has amended Claim 23 to recite statutory subject matter. Accordingly, Applicant respectfully request reconsideration and withdrawal of the rejections.

§ 103 REJECTIONS

Claims 1, 3-4, 6-15, 17-23, and 25-27 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Publication 2004/0153995 to Polonovski (hereinafter "Polonovski") in view of U.S. Publication 2004/0006765 to Goldman (hereinafter "Goldman). Claims 4 and 26 are newly canceled. Respectfully, Applicant submits that the

remaining claims are allowable over the cited references for at least the reasons explained in detail below.

Claims 1, 3 and 6-14

Independent Claim 1, as presently presented, recites:

 A computer readable storage medium having computer-executable instructions, the instructions comprising:

> receiving a string in an interactive environment; identifying an attribution within the string that specifies a constraint for an associated construct:

identifying the construct associated with the attribution;

saving information that correlates the constraint with the construct as metadata that is associated with the construct; and

executing the string in the interactive environment, where executing the string includes using the saved information to apply the attribution to the construct when the construct is encountered during execution. (Emphasis added).

Applicant respectfully traverses the rejection. First, Polonovski does not teach or suggest, "saving information that correlates the constraint with the construct as metadata that is associated with the construct," as recited in Claim 1. (Emphasis added). This element is substantially similar to the element that was recited in canceled Claim 4. Thus, Applicant's remarks are directed to the sections of Polonovski cited by the Office Action in rejecting now canceled Claim 4.

As noted in the Office Action, Polonovski discloses a completion module 220, a context analysis module 230, and a grammar analysis module 225. (Polonovski, Figure 2, 220, 230 and 225; Office Action, Page 6, Paragraph 3). Specifically, Polonovski discloses that the completion module 220 is invoked to "to suggest the use of certain expressions

and statements as the developer is editing source code 210". (Polonovski, Paragraph 61, 1-5).

Polonovski also discloses that the context analysis module 230 "uses the characters that are currently being entered as well as information from the last previously entered statement to determine what is relevant at the current cursor position." (Paragraph 55, Lines 1-8). Likewise, the grammar analysis module 225, as disclosed by Polonovski, is "invoked to determine the nature of the possible elements which may be validly used at the current cursor position." (Paragraph 62, Lines 1-9). In other words, Polonovski, in arguendo, discloses providing certain data based on user input. However, Polonovski does not teach or suggest that the modules 220, 225, and 230 are capable of saving information as "metadata that is associated with the construct," as recited in Claim 1.

Second, the deficiencies of Polonovski with respect to this element are not remedied by Goldman. Goldman discloses that a user may use menu options in this "visual programming environment" to "assign a value to a variable." (Goldman, Paragraphs 111-112). The Office Action states that "assigning a value to a variable effectively specifies a constraint on the variable, namely that the variable must equal to the assigned value." (Office Action, Page 3, Paragraph 2). However, even assuming, in arguendo, that assigning a value to a variable is equivalent to specifying a constraint to a variable, Goldman still does not disclose "saving information that correlates the constraint with the construct as metadata that is associated with the construct," as recited in Claim 1. (Emphasis added). Indeed, the word "metadata" is not present in Goldman. Thus, the cited references to Polonovski and Goldman, whether individually or in combination, do not teach, discloses, or fairly suggest every element of Claim 1. Accordingly, for at least the foregoing reasons, Claim 1 is believed to be allowable.

Due to the Applicant's earnest belief that the Claim 1, as rejected under Section 103(a), is allowable because its recited elements are not taught or suggested in the cited references, Applicant will not address motivation to combine with respect to Claim 1 during this response. However, Applicant hereby reserves the right to further challenge motivation to combine the cited references.

Dependent Claims 3 and 6-14 depend from independent Claim 1 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Claims 15 and 17-22

Independent Claim 15, as presently presented, recites:

15. A method for handling constraints specified within an interactive environment, the method comprising:

identifying a pre-defined begin symbol and end symbol within a string entered in an interactive environment;

identifying a constraint between the begin symbol and the end symbol:

identifying a construct following the end symbol;

saving information that correlates the constraint with the construct as metadata that is associated with the construct; and

executing the string in the interactive environment, where executing the string includes using the saved information to apply the constraint to the construct when the construct is encountered during execution. (Emphasis added).

Applicant respectfully traverses the rejection. Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 1 under 35 U.S.C. § 103(a) to the extent that Claims 1 and 15 recite the same features. Accordingly, Applicant respectfully submits that the cited references to Polonovski and Goldman, whether

individually or in combination, do not teach, discloses, or fairly suggest, "saving information that correlates the constraint with the construct as metadata that is associated with the construct," as recited in Claim 15. Thus, for at least the foregoing reasons. Claim 15 is believed to be allowable.

Due to the Applicant's earnest belief that the Claim 15, as rejected under Section 103(a), is allowable because its recited elements are not taught or suggested in the cited references, Applicant will not address motivation to combine with respect to Claim 15 during this response. However, Applicant hereby reserves the right to further challenge motivation to combine the cited references.

Dependent Claims 17-22 depend from independent Claim 15 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Claims 23, 25, and 27

Independent Claim 23, as presently presented, recites:

 A system that handles input parameters, the system comprising: one or more processors; and

memory to store a plurality of computer-executable instructions for execution by the one or more processors, the computer-executable instructions operable to:

receive a string into a command line interactive environment; identify an attribution within the string:

identify a construct associated with the attribution, the attribution that specifies a constraint for the construct;

save information that correlates the constraint with the construct as metadata that is associated with the construct; and

execute the string in the interactive environment, wherein the execution includes using the saved information to apply the constraint to the construct when the construct is

encountered during an execution of the string in the command line interactive environment, (Emphasis added).

Applicant respectfully traverses the rejection, Specifically, Applicant incorporates the reasoning presented above in response to the rejection of Claim 1 under 35 U.S.C. § 103(a) to the extent that Claims 1 and 23 recite the same features. Accordingly, Applicant respectfully submits that the cited references to Polonovski and Goldman, whether individually or in combination, do not teach, discloses, or fairly suggest, "save information that correlates the constraint with the construct as metadata that is associated with the construct," as recited in Claim 23. Thus, for at least the foregoing reasons, Claim 23 is believed to be allowable.

Due to the Applicant's earnest belief that the Claim 23, as rejected under Section 103(a), is allowable because its recited elements are not taught or suggested in the cited references. Applicant will not address motivation to combine with respect to Claim 23 during this response. However, Applicant hereby reserves the right to further challenge motivation to combine the cited references.

Dependent Claims 25 and 27 depend from independent Claim 23 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Serial No. 10/693,396

CONCLUSION

For at least the foregoing reasons, Claims 1, 3, 6-15, 17-23, 25, and 27 are in condition for allowance. Applicant respectfully requests reconsideration and withdrawal of the rejections and an early notice of allowance.

Respectfully Submitted,

Lee & Hayes, PLLC

Elliott Y. Chen Reg. No. 58293 206-315-7914